

In the claims:

All of the claims standing for examination are presented below with appropriate status indication.

1. (Currently amended) ~~A~~ A card apparatus to provide security for online transactions, comprising:

a standard ISO 7816 eight-pad array including a reset (Rst) pad; and
onboard components comprising digital storage media, first electronic circuitry compliant with ISO 7816 standards and connected to the pad interface, enabling the card apparatus to be used as a conventional smart card, second electronic circuitry enabled to generate a modulated voltage signal using data from the storage media, the second electronic circuitry connected to one pad of the pad interface not used in the ISO 7816 standard configuration, said one pad dedicated as a modulated signal output pad, and control circuitry enabled to control functions of the first and second electronic circuitry;
~~a smart card transmitting an identification sequence, as a modulated voltage signal in a frequency range and voltage amplitude compatible with a microphone input of a personal computer (PC) sound card;~~
~~a connector connecting an output of the smart card transmission to the microphone input of the PC sound card; and~~
~~a PC applet, executed by the PC, demodulating the identification sequence~~
wherein the control circuitry functions to provide that with the standard ISO 7816 reset (Rst) pad high, no modulated signal output is provided to the dedicated modulated signal output pad, and with the standard ISO 7816 reset (Rst) pad pulled low, the modulated voltage signal is provided to the dedicated modulated signal output pad.

2-15. (Cancelled)

16. (Previously presented) A method for providing security for online transactions comprising:

(a) providing a smart card having a standard ISO 7816 eight-pad interface, onboard components comprising digital storage media, and first electronic circuitry compliant with ISO 7816 standards connected to the pad interface, enabling the card apparatus to be used as a conventional smart card, with second electronic circuitry enabled to generate a modulated voltage signal using data from the storage media, the second electronic circuitry connected to one pad of the pad interface not used in the ISO 7816 standard configuration, said one pad dedicated as a modulated signal output pad; and

~~inserting a smart card in a connector for connecting an output of the smart card transmission to a microphone input of a PC sound card, in a PC;—~~

(b) providing on the card control circuitry enabled to control functions of the first and second electronic circuitry, such that, with the standard ISO 7816 reset (Rst) pad high, no modulated signal output is provided to the dedicated modulated signal output pad, and with the standard ISO 7816 reset (Rst) pad pulled low, the modulated voltage signal is provided to the dedicated modulated signal output pad ~~transmitting an identification sequence, as a modulated voltage signal in a frequency range and voltage amplitude compatible with a microphone input of a PC sound card, from the smart card directly to the microphone input of the PC sound card; and~~

~~— (d) demodulating the identification sequence by a PC applet, executed by the PC.~~

17-22. (Cancelled)

23. (New) A system to provide security for online transactions, comprising:

a smart card having a standard ISO 7816 eight-pad array including a reset (Rst) pad, a voltage pad (Vbb), a ground pad (Gnd) and one pad not used in the standard ISO 7816 configuration, which uses six of the eight pads, the smart card also having onboard components comprising digital storage media, first electronic circuitry compliant with ISO 7816 standards and connected to the pad interface, enabling the card apparatus to be used as a conventional smart card, second electronic circuitry enabled to generate a

modulated voltage signal using data from the storage media, the second electronic circuitry connected to one pad of the pad interface not used in the ISO 7816 standard configuration, said one pad dedicated as a modulated signal output pad, and control circuitry enabled to control functions of the first and second electronic circuitry; and

a connector apparatus having a card interface connecting the ISO 7816 interface reset (Rst) pad, voltage pad (Vbb), ground pad (Gnd) and the dedicated modulated signal pad each to a microphone input of a sound card of a general purpose computer, the Rst pad connected through a switch, such that the switch open leaves the Rst pad high, and closing the switch pulls the Rst pad low;

wherein with the (Rst) pad high the control circuitry functions to prevent a modulated signal output to the dedicated modulated signal output pad, and with the (Rst) pad pulled low by closing the switch, the control circuitry functions to provide the modulated signal to the dedicated modulated signal output pad, and thereby to the microphone input of the general-purpose computer.